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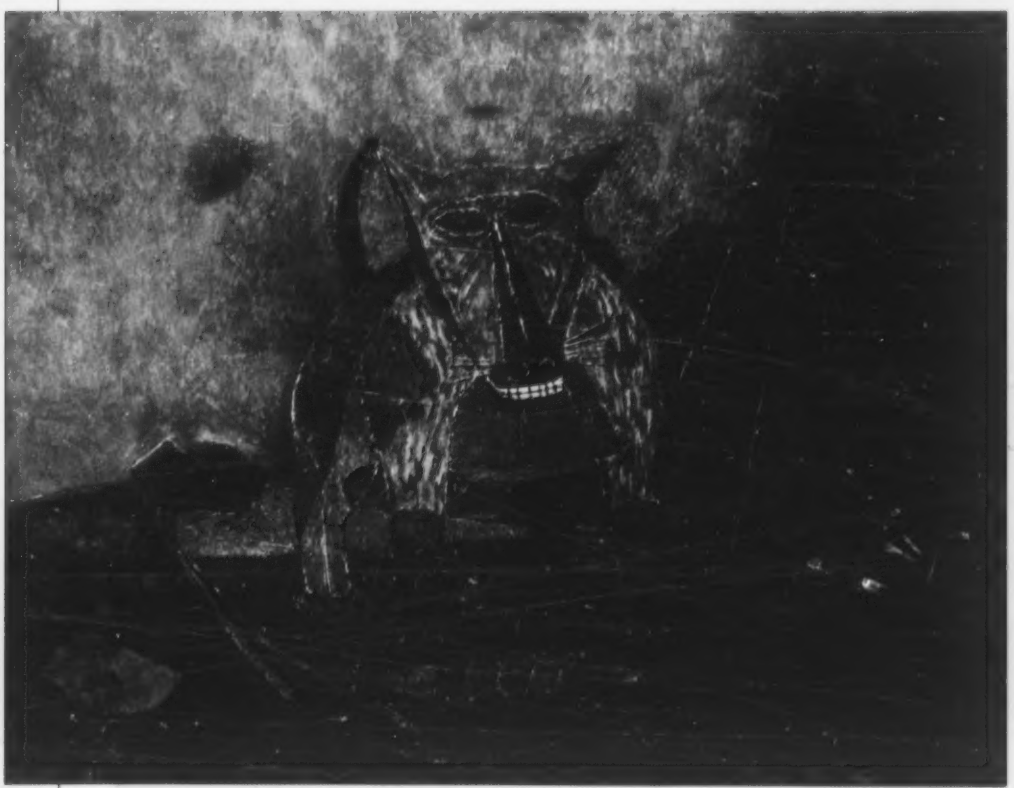

JOURNAL

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About the cover

The Dog and Serpent was painted by Rufino Tamayo in 1943. Tamayo, a Mexican-American, abandoned the school of strong nationalism (established by Mexican painter Rivera in the 1920s) for European reference, and was obviously influenced by Picasso and Braque. The painting reproduced on this issue's cover is a good example of why Tamayo is considered to be one of the most exciting contemporary artists in his use of color. His combination of the colors used in native Mexican weaving and crafts, ie, magentas, blues, oranges, purples, and white with vivid reds, accentuates the intensity of his subjects.

Permission to reproduce the *The Dog and Serpent*, a 34 in × 44 in oil-on-canvas, was granted by The Saint Louis Art Museum (Gift of Morton D. May) where the painting is on display.

Coming Soon . . .

October 15

Pages from the Past—Blood transfusion: A historical review (G. Hosgood)

Food for thought for food animal veterinarians—The veterinarian's role in animal welfare (J. B. Herrick)

Hyperkalemic periodic paralysis in horses (S. J. Spier et al)

Distribution of equine infectious anemia in equids in southeastern United States (M. K. Loftin et al)

Patterns of uterine prolapse in dairy cows and prognosis after treatment (I. A. Gardner et al)

Prophylactic use of dantrolene associated with prolonged postanesthetic recumbency in a horse (A. Valverde et al)

November 1

Statistics Simplified—Study design (S. Shoot)

Reflections—Give it your best shot (H. C. Nicoll)

Legal Brief—The liability potential for laboratory animal and public veterinarians (H. W. Hannah)

Topics in Drug Therapy—Pharmacologic features and physiologic effects of dopamine (G. Hosgood)

Special Commentary—Veterinary services for animal use in the United States: A conflict of paradigms (R. S. Ott)

Effect of nonthyroidal illness on serum, thyroxine concentrations in cats (M. E. Peterson and D. A. Gamble)

Iatrogenic fractures of ribs and vertebrae during delivery in perinatally dying calves (G. Schuijt)

remaining collateral sources can then drain into the maxillary and major palatine arteries. The latter are substantial vessels, with large subsidiary arterial systems,[6] and could drain off or steal a considerable amount of collateral flow that reaches the external ophthalmic artery.[5] Apparently, any compensatory increase in forward flow to the eye is insufficient to restore blood lost through the steal.[5] Ischemia and blindness follow.

With the balloon catheter technique, the maxillary artery is fully occluded at the origin of the external ophthalmic artery so that a steal phenomenon is prevented. As a result, all or most of blood flow from collateral channels that enters the external ophthalmic artery flows to the eye. Simultaneous occlusion of the internal carotid artery does not appear to increase the risk of blindness with this procedure.[3]

The preceding is based largely on speculation, but is consistent with clinical observations and with explanations for steal syndromes in human beings.[5] Although the balloon catheter technique that we have described is more difficult than ligation procedures, it has the advantage of isolating the infected segment of artery from as many collateral channels as possible, apparently without jeopardizing blood flow to the eye.[3] Nonetheless, owners should be warned of the possibility of unilateral blindness following any technique for occlusion of the external carotid artery and its branches within the guttural pouch.

David E. Freeman, MVB, PhD
Michael W. Ross, DVM
William J. Donawick, DVM
Kennett Square, Pa

1. Smith KM, Barber SM. Guttural pouch hemorrhage associated with lesions of the maxillary artery in two horses. *Can Vet J* 1984;25:239–242.

2. Hardy J, Robertson JT, Wilkie DA. Ischemic optic neuropathy and blindness after arterial occlusion for treatment of guttural pouch mycosis in two horses. *J Am Vet Med Assoc* 1990;196:1631–1634.

3. Freeman DE, Ross MW, Donawick WJ, et al. Occlusion of the external carotid and maxillary arteries in the horse to prevent hemorrhage from guttural pouch mycosis. *Vet Surg* 1989; 18:39–47.

4. Freeman DE and Donawick WJ. Occlusion of the internal carotid in the horse by means of a balloon-tipped catheter: evaluation of a method designed to prevent epistaxis caused by guttural pouch mycosis. *J Am Vet Med Assoc* 1980;176:232–235.

5. Mannick JA. Subclavian steal syndrome. In: Sabiston DC, ed. *Davis-Christopher textbook of surgery*. 12th ed. Philadelphia: WB Saunders Co, 1981; 1933–1939.

6. Ghoshal NG. Equine heart and arteries. In: Getty R, ed. *Sisson and Grossman's the anatomy of domestic animals*. 5th ed. Philadelphia: WB Saunders Co, 1975;573–578.

7. Anderson BG, Anderson WD. Vasculature of the equine and canine iris. *Am J Vet Res* 1977;38:1791–1799.

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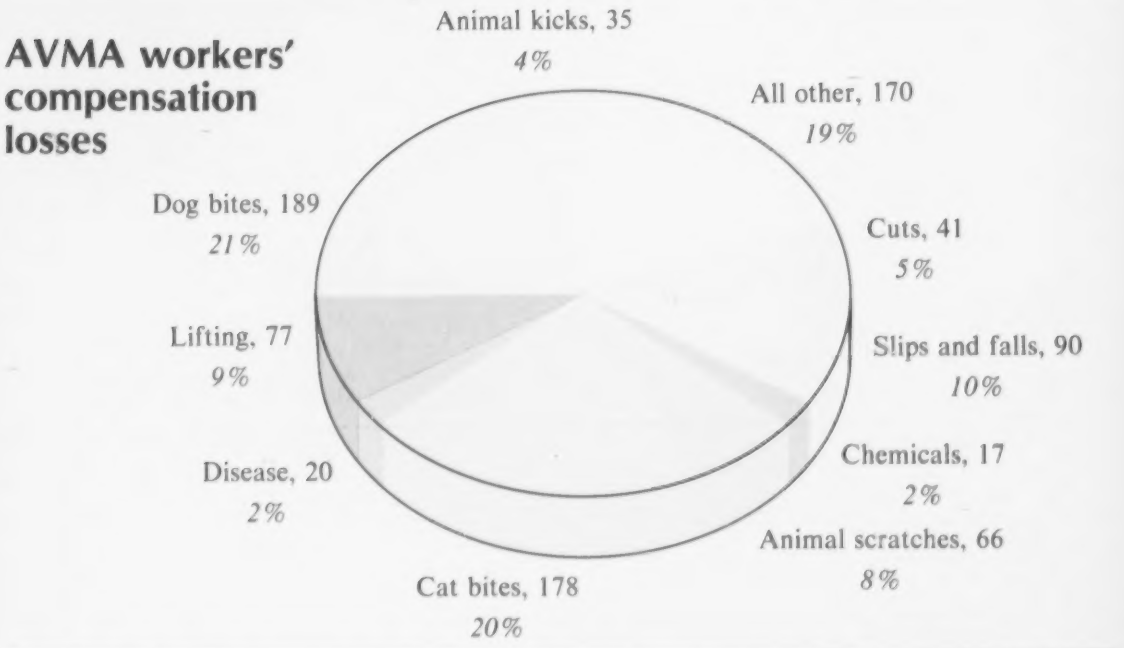
BPA

Workers' compensation policies cause confusion



The above chart, covering losses from July 1989 through July 1990, illustrates the categories of losses, the number of losses in each category, and the percentage of the total these losses represent.

Many veterinarians have called the AVMA Group Health and Life Insurance Trust office to ask whether it is necessary to carry workers' compensation insurance coverage when they already provide accident and health insurance to their employees through the Trust.

Although workers' compensation laws vary from state to state, most states require employers to carry such insurance for their employees. Employers who do not comply are subject to fines and civil penalties.

Many veterinarians believe that anytime an employee gets injured, whether on or off the job, the group health insurance will provide complete coverage for the claim. However, medical expenses for on-the-job injuries or illnesses for which individuals are entitled to benefits under a workers' compensation act or similar law will not be covered by the Trust's major medical policy. This means that if an employee is injured on the job and is covered by workers' compensation insurance, the medical expenses will be considered ineligible by the AVMA's major medical carrier.

In most states, employers have the option of including or excluding themselves from workers' compensation coverage. However, other states require an employer to be excluded from or included in the workers' compensation coverage, depending on the type of business entity. If a veterinarian employer elects to be covered under a workers' compensation policy, that veterinarian would receive medical expense benefits under workers' compensation; again, these benefits would not be paid under the AVMA major medical plans.

Veterinarians with questions can call the Trust office and speak with representatives from either the Trust or the AVMA Workers' Compensation program.

Workers' compensation losses

Atlantic Mutual Companies, the insurer for the AVMA Workers' Compensation and Professional Liability insurance programs, has produced statistics on the type and

frequency of reported claims for workers' compensation. These statistics cover a one-year period, from July 1989 through July 1990. These numbers help identify potentially dangerous activities of which members should be aware to help reduce the frequency and severity of injuries. Of 15 cause-of-loss categories, cat and dog bites topped the list—contributing more than 40% to total losses. They accounted for 368 of a total 883 claims. The amount paid out for dog and cat bites was $294,745 (26% of the total). The category that contributed the next highest amount of claims was "slips, trips, falls—on premises." There were 82 such losses, accounting for 9.2% of the total. This translates into $220,861 or 19.5% of the total amount paid.

Many animal bite claims could be avoided by using protective devices such as muzzles or gloves. Likewise, slips and trips can be avoided by using rubber mats over wet floors and taping down loose edges of carpeting or electrical cords.

The AVMA Professional Liability Insurance Trust, in conjunction with Atlantic Mutual Companies, has produced a safety poster to help educate employees on how to reduce potential losses. Veterinarians who would like this poster should call Michele McDevitt at the Trust's new toll-free number, 1-800-228-7548. Information about Professional Liability or Workers' Compensation insurance may also be obtained from the Trust.

Prepared by Michael J. Ahlert of Mack and Parker, Inc, Chicago, on behalf of the AVMA Professional Liability Insurance Trust.

Trust office adds toll-free number

The AVMA Professional Liability Insurance Trust office introduced a new toll-free telephone number and mailing address for veterinarians inquiring about their Professional Liability and Workers' Compensation insurance policies. The new number is 1-800-228-7548 (1-800-228-PLIT). The new address is PO Box 1629, Chicago, IL 60690-1629. This change went into effect Sept 17, 1990.

The new telephone number, to be used exclusively for veterinarians who carry Professional Liability or Workers' Compensation insurance coverage, will minimize the waiting time to make coverage changes or ask questions. Additional lines will be opened to better serve insured members.

The AVMA Group Health and Life Insurance Trust will continue to use its current toll-free number and mailing address: 1-800-621-6360, and 55 E Jackson Blvd, 8th Floor, Chicago, IL 60604.

Technicians Today

Dietitian award announced

Beginning with the 1990 competition, two recipients will be chosen for the Small Animal Clinical Dietitian Award from Hill's Pet Products.

One award will be made to a veterinary technician who has graduated from an AVMA-accredited veterinary technology school or who has earned this title by being certified, licensed, or registered. The other will be made to a veterinary hospital staff member.

Each of the two winners will receive a plaque, a check for $1,000, and an all-expense-paid trip to the 1991 Western Veterinary Conference in Las Vegas. Entry forms are available from Veterinary Affairs, Hill's Pet Products, 400 SW 8th St, Topeka, KS 66603. Entries must be received by Nov 1, 1990. For more information, contact Janet Grace, LVT at Hill's, 1-800-255-0449.

Convention Spotlight

Honor roll . . . from 825

Dr. Alexander E. Whaley, Kissimmee, Fla
Dr. Roland G. Whitehead, Springville, NY
Dr. Alexander T. Wiatt, Hampton, Va
Dr. J. D. Williamson, Clarksville, Mo
Dr. Stanton Williamson, Brownsburg, Ind
*Dr. T. Ellsworth Willis, Honesdale, Pa
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Dr. John K. Winkler, Auburn, Ala
Dr. Roland W. Winterfield, West Lafayette, Ind
Dr. R. George Wiswall, Glens Falls, NY
Dr. Arthur H. Wolff, Washington, DC
Dr. Robert P. Worthman, Camano Island, Wash
Dr. Leo A. Wuori, Guyton, Ga
Dr. Robert M. Young, Osage, Iowa
Dr. Theodore Zimmerman, Palm Beach, Fla

**Recently deceased; see page 832 for obituaries on Drs. Leo R. Wempe and T. Ellsworth Willis.*